

REMARKS

Applicant thanks the Examiner for the opportunity of a telephonic Examiner Interview conducted on August 13, 2003. The following will serve as Applicant's statement of the substance of the interview.

During the interview, Applicant's representative explained the patentability arguments as set forth in the within Request for Reconsideration. Further, referring to the Specification, page 8, examples of the types of information that may constitute the layer 3 filter information were explained. Applicant's representative asked the Examiner for clarification about where specific features of claim 1 were disclosed in the cited references as alleged by the Examiner. However, the Examiner provided no information beyond that which he set forth in the final Office Action.

At the conclusion of the interview, the Examiner stated that he will further consider our arguments upon the filing of the formal response.

Claims 1-5 are all the claims pending in the Application.

Formal Matters

Applicant thanks the Examiner for acknowledging the claim for foreign priority and receipt of the priority document.

Applicant thanks the Examiner for withdrawing the objections to the drawings filed February 24, 2000.

REQUEST FOR RECONSIDERATION UNDER 37 C.F.R. § 1.116
U.S. Application No. 09/512,088

Q57985

Applicant also thanks the Examiner for reviewing and considering the references cited in the Information Disclosure Statement filed February 24 and May 5, 2000, respectively.

Rejection of Claims 1-3 under 35 U.S.C. § 103

Claims 1-3 are rejected under 35 U.S.C. § 103(a) as being obvious over Civanlar, et al. (U.S. Patent No. 5,828,844) in view of Cox, et al. (U.S. Patent No. 6,189,041). This rejection is traversed.

Applicant's claimed invention defines a new and nonobvious method for transferring MPOA (multi-protocol over asynchronous transfer mode) packet. This method would not have been obvious from any reasonable combination of Civanlar and Cox. Among the problems recognized and solved by Applicant's claimed invention, is the need to prevent the creation of an undesirable shortcut path, meaning a path between an undesirable source from which a data packet is not permitted to be transmitted to the destination terminal.¹ According to an aspect of Applicant's claimed invention, this security problem is addressed by an MPOA server that determines whether an address resolution request is to be forwarded. Civanlar and Cox do not identify this problem, let alone disclose the solutions provided by Applicant's claimed invention.

¹ Applicant does not represent that every embodiment of Applicant's claimed invention necessarily solves the above-identified problem, or provides the particular solutions herein discussed. This discussion merely illustrates some aspects of Applicant's claimed invention.

REQUEST FOR RECONSIDERATION UNDER 37 C.F.R. § 1.116
U.S. Application No. 09/512,088

Q57985

Independent claim 1 requires, *inter alia*, determining after receiving an address resolution request packet from an MPOA client whether or not the address resolution request packet is to be forwarded.

Civanlar discloses the use of an internet NCP (Network Communication Protocol) over an ATM (Asynchronous Transfer Mode). Civanlar discloses a classical IP model of hop-by-hop routing in which the IP switching (Internet Protocol Switching) is totally decoupled from the ATM network infrastructure. In the classical IP model according to Civanlar, the router determines the next appropriate hop by consulting a routing table based on the IP address provided. In particular, Civanlar discloses that the source host sends an address resolution request to an address resolution protocol (ARP) server 7, and that the ARP server 7 performs the IP to ATM address translation service and transmits the mapped address to the client. (Civanlar, column 2, line 35 - column 3, line 28.) Civanlar further discloses a cut-through router in which no intermediate hops through routers are required, but instead the source host must first determine the ATM address of the destination host from the IP address, such that each LIS (Local IP Subset) has an NHRP (Next Hop Routing Protocol) server that makes it possible to communicate across different local internet subsets. (Civanlar, column 3, line 45 - column 4, line 18.) That is, the NHS (Next Hop Server) maps the IP address of the destination terminal to a corresponding ATM address which is previously cached (or is within the local IP subset). Civanlar does not address the problem of an undesirable shortcut path or an undesired source node, let alone disclose or suggest the solutions provided by Applicant's claimed invention.

First, Civanlar does not disclose a MPOA server. Therefore, Civanlar is incapable of disclosing an MPOA server that determines whether or not an address resolution request packet is to be forwarded. That is, the router disclosed in Civanlar and the IP switch, integrating the conventional router and an ATM switch, discussed in Civanlar do not determine whether or not an address resolution request packet is to be forwarded.

Further, claim 1 requires, *inter alia*, determining by the MPOA server whether or not the MPOA address resolution request packet is to be forwarded, based on layer 3 packet filter information. The Examiner cites Civanlar col. 2, line 62 - col. 3, line 5 and alleges that Civanlar discloses layer 3 packet filter information. This passage of Civanlar discloses IP switching totally decoupled from the ATM network infrastructure under what Civanlar terms the classical IP model, in which each router determines the next hop router by performing layer 3 processing of the IP packet. That is, the router “inspects” the IP packet for the destination address to derive the next hop router accordingly.

Thus, contrary to the Examiner’s analysis, Civanlar does not disclose or suggest processing packet filter information, let alone determining whether or not a packet is to be forwarded based on the packet filter information. states that layer 3 filter information is information for determining whether or not a packet is permitted to pass through. This determination is made based layer 3 filtering information. According to an aspect of Applicant’s invention, this layer 3 filtering information may include a source layer address, which can be used in the determination by the MPOA server (Applicant’s Specification, page 8). Clearly, Civanlar does not disclose or suggest determining by the MPOA server whether or not the

REQUEST FOR RECONSIDERATION UNDER 37 C.F.R. § 1.116
U.S. Application No. 09/512,088

Q57985

MPOA address resolution request packet is to be forwarded based on layer 3 packet filter information, as required by Applicant's claim 1.

Cox discloses a next hop resolution protocol cut-through to LANS (Local Area Network Server). Cox is concerned with an NHRP client in a local IP subset (LIS) or ELAN IP subnetwork (Emulated Local Area Network Internet Protocol subnetwork) by-passing one or more hops in getting from the source node to the destination node. Cox does not remedy the deficiencies of Civanlar, as they relate to Applicant's claimed invention. In particular, Cox does not disclose determining by MPOA server whether or not the address resolution request packet is to be forwarded based on layer 3 packet filter information. Therefore, the unlikely combination of Civanlar and Cox does not disclose or suggest all the recitations of claim 1.

Claims 2 and 3 depend from independent 1, and thus incorporate all the novel and nonobvious features thereof. Therefore, claims 2 and 3 are patentably distinguishable over the prior art for at least the reasons that claim 1 is patentably distinguishable over the prior art.

Rejection of Claims 4 and 5 under 35 U.S.C. § 103

Claims 4 and 5 are rejected under 35 U.S.C. § 103(a) as being obvious over Civanlar and Cox and further in view of Huey, et al. (U.S. Patent No. 5,467,349). This rejection is traversed.

Claims 4 and 5 depend from independent claim 1, and thus incorporate novel and nonobvious features thereof. Huey discloses an address handler for an asynchronous transfer mode switch. Huey does not remedy the deficiencies of Civanlar and Cox as they relate to Applicant's invention, as claimed in claim 1. In particular, Huey does not disclose determining

REQUEST FOR RECONSIDERATION UNDER 37 C.F.R. § 1.116
U.S. Application No. 09/512,088

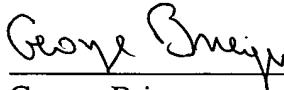
Q57985

by an MPOA server whether or not the address resolution request packet is to be forwarded, let alone based on layer 3 packet filter information, as further required by Applicant's claim 1.

In view of the foregoing remarks, reconsideration and allowance of this Application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



George Brieger
Registration No. 52,652

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE



23373

PATENT TRADEMARK OFFICE

Date: September 8, 2003